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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,416

11/20/2003

Jury Peter Locker

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06/29/2004

WENDEROTH, LIND & PONACK, L.L.P.

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SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

EDWARDS, ANTHONY Q

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/716,416

Applicant(s)

LOCKER, JURY PETER

Examiner

Anthony Q. Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/20/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 15 is objected to because of the following informalities: the claim recites “the CPU” which lacks proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 10, 11, 13-15, 17, 18 and 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,250,378 to Kobayashi. Referring to claim 1, Kobayashi discloses a computer comprising a casing (51) having a display (7), which is bordered by a frame (12), wherein the frame is a passage (59) for a cooling fluid. See Figs. 1 and 2 and the corresponding specification.

Referring to claim 2, Fig. 2 of Kobayashi shows a computer, wherein the passage (59) extends around the frame (12).

Referring to claim 3, Fig. 2 of Kobayashi shows a computer, wherein the frame (12) itself forms the passage for the cooling fluid.

Referring to claim 4, Fig. 2 of Kobayashi shows a computer, wherein the frame is of a single-wall configuration.

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Referring to claims 5 and 6, Kobayashi discloses a computer as claimed. It is noted that, even though the claims are limited by and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art was made by the different process. *See In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).*

Referring to claims 10 and 11, Kobayashi discloses a computer, wherein arranged on the passage are connecting portions projecting into the interior of the casing, and wherein the passage has two connection portions (i.e., 36 adjacent “C” and not numbered adjacent “A”).

Referring to claim 13, Kobayashi discloses a computer, wherein there is a fluid-conducting communication between the passage (59) arranged in the frame (12) and at least one heat exchanger (2) in the interior of the casing. See Fig. 39A and the corresponding specification.

Referring to claim 14, Kobayashi discloses a computer, wherein the fluid-conducting communication is a hose (34/35) connection). See Fig. 39A and the corresponding specification.

Referring to claim 15, Kobayashi discloses a computer, wherein a heat exchanger (2) is arranged at the CPU (1). See Fig. 39A and the corresponding specification.

Referring to claims 17 and 18, Kobayashi discloses a computer, wherein the cooling fluid is a liquid and wherein the cooling fluid is water. See col. 6, lines 54-56.

Referring to claims 20 and 21, Kobayashi discloses a computer, wherein the display is in the form of a touch display, and wherein the computer is an industrial computer, respectively. See col. 13, lines 6-10 wherein various devices and uses for cooling system are provided.

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Referring to claim 22, Kobayashi discloses a casing for electronic components, wherein the casing includes a frame (12) in which a passage (59) for a cooling fluid is arranged. See Fig. 2 and the corresponding specification.

Referring to claim 23, Kobayashi discloses a casing for electronic components, wherein frame (12) forms the cooling passage (59) for the cooling fluid. See Fig. 2 and the corresponding specification.

Referring to claims 24 and 25, Kobayashi discloses a casing for electronic components, wherein the frame is a computer casing, and wherein the casing is a casing of an industrial computer, respectively. See Fig. 2 and col. 13, lines 6-10, wherein various devices and uses for cooling system are provided.

Referring to claims 26 and 27, Kobayashi discloses a method of cooling as claimed. See Fig. 2 and the corresponding specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi.

Kobayashi discloses the computer as claimed, except for the cooling fluid being distilled water.

Kobayashi discloses using water as the cooling fluid. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize distilled water as the

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cooling fluid, since it has been held to be within the general skill of the worker in the art to select a known material on the basis of that its more pure than another like material. The mere purity of a product or material, by itself, does not render the product unobvious. See *Ex parte Gray*, 10 USPQ2D 1922 (Bd. Pat. App. & Inter 1989).

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of U.S. Patent Application Publication No. US2002/0067591 to Tajima. Referring to claim 7, Kobayashi discloses the computer as claimed, except for outwardly projecting cooling ribs arranged on the casing. Tajima discloses an image display panel device (1) having a casing (2), wherein outwardly projecting cooling ribs (2-a3) are arranged thereon. See Fig. 2A and the corresponding specification of Tajima. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the computer casing of Kobayashi to include outwardly projecting cooling ribs, as taught by Tajima to more efficiently dissipate heat from electronic components within the casing of Kobayashi.

Referring to claim 8, Kobayashi discloses the computer as claimed, except for the casing having cooling ribs that which project into the interior of the casing. Fig. 2A of Tajima shows an image display panel device (1) having a casing (2), wherein the casing includes cooling ribs (2-a2) that project into the interior of the casing.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of U.S. Patent No. 5,757,615 to Dohahoe et al. Kobayashi discloses the computer as claimed, except for cooling ribs arranged at least in a portion-wise manner at the inward side of the passage. Donahoe et al. disclose a liquid cooled computer having cooling ribs (72) arranged at least in a portion-wise manner at the inward side of a cooling passage (88). See Figs. 2 and 3

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and the corresponding specification of Donahoe et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cooling passage of Kobayashi to include cooling ribs arranged at least in a portion-wise manner at the inward side of the passage, as taught by Donahoe et al. to allow the cooling liquid in the passage of Kobayashi to dissipate heat more efficiently.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of U.S. Patent No. 5,606,341 to Aguilera. Kobayashi discloses the computer as claimed, except for a respective connecting portion is arranged at each of the top side and the underside of the frame. Aguilera discloses CPU cooling and LCD heating of a laptop computer comprising a frame (160) and radiator like element (80) provided having within the frame and adjacent a LCD (70), wherein a respective connecting portion is arranged at each of the top side (90) and the underside (100) of the frame. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the computer frame of Kobayashi to include connecting portions at both the top side and the underside of the frame, as taught by Aguilera in order to take advantage of gravitational forces in the distribution and flow of the cooling fluid, which would inherently provide for more efficient cooling of the system.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of U.S. Patent No. 6,674,642 to Chu et al. Kobayashi discloses the computer as claimed, except for providing at least one pump in the interior of the casing. Chu et al. disclose a cooling system for portable computers including a pump (22) within the casing (12) providing circulation of the cooling fluid a cooling circuit. See Fig. 1 and col. 5, lines 21-24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify computer of

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Kobayashi to include a pump, as taught by Chu et al. to increase or control the amount of cooling fluid within the passage at any given time.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,055,156 to von Gutfeld discloses a case for a portable computer having internal and external ribs; and U.S. Design Patent No. D454,565 to Harriman disclose a display housing with external ribs thereon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 28, 2004
aqe


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